

Amendments to the Claims: This listing of claims will replace all prior versions, and listings, of claims in the application

Listing of Claims:

1. (Original) A method for deployment of a multi-part endoluminal device in a distal location in a body lumen from a proximal location, the device having at least a first portion and a second portion, each portion having a distal end and a proximal end, the method comprising the steps of:

(a) deploying the first portion in a body lumen by aligning the first portion distal end in a desired location and then deploying a remainder of the first portion including the first portion proximal end; and

(b) deploying the second portion in the body lumen by aligning and anchoring the second portion proximal end in a desired location and then deploying a remainder of the second portion including the second portion distal end in overlapping engagement with the first portion proximal end.

2. (Original) The method of claim 1, wherein step (a) comprises deploying the first portion sequentially from the distal end to the proximal end and step (b) comprises deploying the second portion sequentially from the proximal end to the distal end.

3. (Original) The method of claim 1, wherein the first portion comprises a modular bifurcated device having a main body portion with a distal end, a first stump, and a second stump, each stump having a proximal end, and the second portion comprises at least one leg portion adapted to interface with the first stump, wherein step (a) comprises deploying the bifurcated device in a body lumen by aligning the distal end of the main body portion in a desired location and deploying the remainder of the first portion sequentially from the distal end to the first stump proximal end and second stump proximal end, and step (b) comprises deploying the leg portion with the leg portion distal end in overlapping engagement with the first stump proximal end.

4. (Original) The method of claim 3, wherein the bifurcated device is adapted to be deployed in an aorta and the leg portion is adapted to be deployed in an iliac artery.

5. (Original) The method of claim 4, wherein the desired location for the leg portion proximal end is distal of an internal iliac artery.

6. (Original) The method of claim 3, wherein the device further comprises a second leg portion having a distal end and a proximal end, the steps further comprising:

(c) deploying the second leg portion in the body lumen by aligning and anchoring the second leg portion proximal end in a desired location and then deploying a remainder of the second leg portion including the second leg portion distal end in overlapping engagement with the second stump proximal end.

7. (Original) The method of claim 6, wherein the bifurcated device is adapted to be deployed in an aorta and the two leg portions are each adapted to be deployed in an iliac artery.

8. (Original) The method of claim 6, wherein step (a) comprises deploying the main body portion sequentially from the distal end to the proximal ends of the stumps and steps (b) and (c) comprise deploying each of the first and second leg portions sequentially from the proximal end to the distal end.

9. (Original) The method of claim 6, wherein the steps (a) and (b) are performed from a first proximal access location and step (c) is performed from a second proximal access location.

10. (Original) The method of claim 3, wherein the device further comprises a second leg portion having a distal end and a proximal end and a leg connector portion having a proximal end and a distal end and adapted to interface with the second stump and the second leg portion, the method further comprising the steps of:

(c) deploying the leg connector portion by aligning the leg connector distal end with the second stump proximal end and then deploying a remainder of the leg connector including the leg connector proximal end; and

(d) deploying the second leg portion in the body lumen by aligning and anchoring the second leg portion proximal end in a desired location and then deploying a remainder of the second leg portion including the second leg portion distal end in overlapping engagement with the leg connector proximal end.

11. (Original) The method of claim 10, wherein the steps (a) and (b) are performed from a first proximal access location and steps (c) and (d) are performed from a second proximal access location.

12. (Original) The method of claim 10, wherein steps (a) and (b) comprise deploying each of the main body portion and the leg connector sequentially from its respective distal ends to its respective proximal end or ends and steps (c) and (d) comprise deploying each of the first and second leg portions sequentially from its respective proximal end to its respective distal end.

13. (Original) A method for deployment of a multi-part endoluminal device in a distal location in a body lumen from a proximal location, the device comprising a modular bifurcated device comprising a main body portion, two leg portions, and at least one leg connector portion, the main body portion having a distal end and two stump portions, each stump portion having a proximal end, the leg connector portion having a proximal end and a distal end, the leg connector portion adapted to interface with one of the two stump portions and one of the two leg portions, the method comprising the steps of:

(a) deploying the main body portion by first aligning and anchoring the main body portion distal end in a desired location in the body lumen, and then deploying a remainder of the main body portion including the two stump portion proximal ends;

(b) deploying the leg connector portion by first aligning and anchoring the leg connector portion distal end in one of the two stump portion proximal ends, and then deploying a remainder of the leg connector portion in the body lumen including the leg connector portion proximal end; and

(c) deploying a first of the leg portions by first aligning and anchoring the proximal end of the first leg portion in a desired location in the body lumen and then deploying a remainder of the first leg portion such that the leg portion distal end is in overlapping engagement with the leg connector portion proximal end.

14. (Currently Amended) The method of claim ~~13~~, wherein step (e~~b~~) comprises

(e~~b~~1) inserting an introducer into the body lumen, the introducer comprising a retrograde portion; an anterograde portion; a shaft having a distal tip; an inner sheath

mounted concentrically over the shaft with the endoluminal device mounted concentrically over the inner sheath; and an anterograde sheath proximally attached to the shaft distal tip, mounted over the endoluminal device in the anterograde portion of the introducer, and axially moveable relative to the inner sheath;

(eb2) aligning the introducer in a deployment location;

(eb3) extending the shaft to distally advance the anterograde sheath to deploy at least a distal portion of the endoluminal device; and

(eb4) removing the introducer from the body lumen.

15. (Currently Amended) The method of claim 14, wherein the introducer further comprises anchoring means in the anterograde portion for anchoring the endoluminal device during deployment of the device from a proximal end to a distal end of the device, the method comprising aligning the proximal end of the device with the deployment location in step (eb2) and confining the endoluminal device between the anchoring means and the advancing anterograde sheath in step (eb3).

16. (Currently Amended) The method of claim 14, wherein the introducer further comprises anchoring means for anchoring a proximal portion of the endoluminal device during deployment of the device from a proximal end to a distal end of the device, the method comprising aligning the proximal end of the device with the deployment location in step (eb2), anchoring the proximal end prior to or during step (eb3), and releasing the proximal end prior to or concurrently with step (eb4)

17. (Currently Amended) The method of claim 16, wherein the anchoring means comprises an inflatable balloon and the anterograde sheath extends proximally over the balloon, in which the method further comprises in step (eb3) partially advancing the anterograde sheath to expose the balloon, inflating the balloon, completing advancement of the anterograde sheath, and then deflating the balloon.

18. (Currently Amended) The method of claim 16, wherein the anchoring means comprises an inflatable balloon, and the method further comprises inflating the balloon prior to step (eb3) and deflating the balloon after step (eb3).

19. (Original) The method of claim 18, wherein the introducer further comprises a proximally retractable retrograde sheath mounted concentrically over the shaft and inner sheath and extending axially over the proximal end of the endoluminal device and the balloon, the method further comprising retracting the retrograde sheath prior to inflating the balloon, and inflating the balloon to anchor the proximal end of the endoluminal device against the body lumen.

20. (Original) The method of claim 18, wherein the introducer further comprises a proximally retractable retrograde sheath mounted concentrically over the shaft and inner sheath and extending axially over the proximal end of the endoluminal device and the balloon, the method further comprising inflating the balloon to anchor the proximal end of the endoluminal device against the retrograde sheath and then retracting the retrograde sheath after deflating the balloon.

21. (Currently Amended) A system for deploying an endoluminal device, the system comprising:

a first introducer loaded with a first endoluminal device having a distal end and a proximal end, the first introducer adapted to deploy the device sequentially from the distal end to the proximal end; and

a second introducer loaded with a second endoluminal device having a proximal end and a distal end adapted to engage the first endoluminal device proximal end, the second introducer adapted to anchor the proximal end of the second endoluminal device while deploying the second endoluminal device sequentially from the proximal end to the distal end.

22. (Original) The system of claim 21, wherein the second endoluminal device distal end is adapted to be deployed radially within the first endoluminal device proximal end.

23. (Original) The system of claim 22, wherein the second endoluminal device distal end is adapted to laterally overlap the first endoluminal device proximal end along a length of at least about 2 centimeters.

24. (Original) The system of claim 21, wherein the first endoluminal device comprises a bifurcated device having a main body portion with a distal end, and two stumps, each stump having a proximal end, and the second endoluminal device comprises a first leg portion adapted to interface with the first stump.

25. (Original) The system of claim 21, wherein the first endoluminal device comprises a bifurcated device having a main body portion with a distal end, a first stump with a proximal end, and a second stump with a proximal end, in which the second endoluminal device comprises a first leg portion adapted to interface with the first stump, and the system further comprises a third introducer loaded with a second leg portion having a proximal end and a distal end adapted to engage the second stump proximal end, the third introducer adapted to anchor the proximal end of the second leg portion while deploying the second leg portion sequentially from the proximal end to the distal end.

26. (Original) The system of claim 21 further comprising

a third introducer loaded with a bifurcated endoluminal device having a main body portion with a distal end, a first stump with a proximal end, and a second stump with a proximal end, the third introducer adapted to deploy the main body portion sequentially from the distal end to the first and second stump proximal ends;

wherein the first endoluminal device is a leg connector adapted to interface with the first stump proximal end, and the second endoluminal device comprises a first leg portion adapted to interface with the leg connector.

27. (Original) The system of claim 26 further comprising:

a fourth introducer loaded with a second leg portion having a proximal end and a distal end adapted to engage the second stump proximal end, the fourth introducer adapted to anchor the proximal end of the second leg portion while deploying the second leg portion sequentially from the proximal end to the distal end.

28. (Original) The system of claim 21, wherein the second introducer comprises:

a shaft having a distal tip;

an inner sheath mounted concentrically over the shaft;

the endoluminal device mounted concentrically over the inner sheath, and

an antegrade sheath attached distally to the distal tip, mounted over the endoluminal device in the antegrade portion of the introducer, and distally moveable relative to the inner sheath by moving the shaft.

29. (Original) The system of claim 25, wherein the second introducer and the third introducer each comprise:

a shaft having a distal tip;

an inner sheath mounted concentrically over the shaft;

the endoluminal device mounted concentrically over the inner sheath; and

an antegrade sheath attached distally to the distal tip, mounted over the endoluminal device in the antegrade portion of the introducer, and distally moveable relative to the inner sheath by moving the shaft.

30. (Original) The system of claim 27, wherein the second introducer and the fourth introducer each comprise:

a shaft having a distal tip;

an inner sheath mounted concentrically over the shaft;

the endoluminal device mounted concentrically over the inner sheath; and

an antegrade sheath attached distally to the distal tip, mounted over the endoluminal device in the antegrade portion of the introducer, and distally moveable relative to the inner sheath by moving the shaft.